CVCWA

CENTRAL VALLEY CLEAN WATER ASSOCIATION

Formerly the Central Valley Wastewater Manager's Association

Representing Over Forty Wastewater Agencies

STAN DEAN – CHAIR, SRCSD **STEVE WILSON – VICE CHAIR, CERES**
JACQUE McCALL – SECRETARY, VACAVILLE **MICHAEL BERKLICH – TREASURER, TURLOCK**

Salinity-1/31/06
Workshop

January 20, 2006

Ms. Selica Potter
Acting Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, California 95812-0100

commentletters@watrboards.ca.gov

RE: **COMMENT LETTER – 1/31/06 WORKSHOP ON SALINITY**

Dear Ms. Potter:

The Central Valley Clean Water Association (CVCWA) submits the following comments in response the State Water Resources Control Board's (State Water Board) Notice of Public Workshop for *Salinity Issues in the Central Valley*. CVCWA is an association of local public agencies providing wastewater collection, treatment and water recycling services throughout the Central Valley region.

CVCWA submitted comments on this issue in July at the State Water Board's first workshop held in Modesto. In the State Water Board's current notice, it states that the State Water Board and the Central Valley Regional Water Quality Control Board (Regional Board) will consider if further action is needed on this issue. On behalf of CVCWA and our members, we can assure you that future action is necessary.

Currently, many Central Valley "Publicly Owned Treatment Works" (POTWs) are receiving effluent limits for salt parameters that are not feasible with currently used treatment technologies. This includes advanced, or tertiary, treatment of wastewater effluent. Most of the effluent limits are based on protecting the most salt sensitive

crops that may or may not be grown with water mixed with wastewater discharges. Some limits are based on the drinking water standard that applies to tap water. In some cases, POTWs are given effluent limits that are based on background salt levels plus an increment for

additional salt contributed by domestic uses. In all of these instances, most POTWs cannot meet the effluent limitations being imposed.

For most POTWs, salt levels in effluent are pre-determined by the salt levels in the influent, or the municipalities' drinking water supply. Additional salt is added through domestic use, water softeners and the treatment process. The only wastewater treatment process currently known to remove salts is reverse osmosis (RO). RO is expensive, creates brine for which disposal is an issue and is energy intensive. RO is not a feasible option for most Central Valley communities. In the alternative, the Regional Board has advised that municipalities should look for new sources of drinking water that are lower in salt in order to meet salinity based effluent limits. Typically, such sources of drinking water are surface water supplies.

The widespread availability of surface water for Central Valley communities instead of groundwater is an issue that the State Water Board should be involved. The Regional Board looks at switching to surface water as the answer for addressing water quality issues. However, the Regional Board does not have the jurisdictional authority or expertise to consider this issue in relationship to the state's larger water supply issues. Thus, we continue to support the State Board's involvement in Central Valley salinity issues. Plus, there are some Central Valley communities that utilize surface water supplies as their primary source of drinking water that still cannot meet the conservative salt related effluent limits that are being imposed by the Regional Board. In other words, a change in drinking water supplies does not guarantee a community that it can meet the conservative effluent limits currently being imposed by the Regional Board.

In addition, CVCWA continues to be troubled by the Regional Board's interpretation of the narrative chemical objective for salinity parameters with the most conservative recommended goals developed by the Food and Agricultural Organization of the United Nations in a 1985 publication (UN Report, 1985). The UN Report is a publication designed to provide guidance and assistance to farm and project managers in evaluating and identifying potential problems related to water quality. The Report is filled with statements that guide against using the Report to make conclusions without considering field conditions and without being "checked, confirmed and tested by field

trials or experience."[1] The State Water Board essentially agreed with this concept in its decision in *City of Woodland* (WQO 2004-0010). In that Order, the State Water Board stated that "[t]he UN Report makes it clear that site-specific considerations are important in assessing irrigation water suitability." (WQO 2004-0010, page 8.) As a result, the State Water Board revised the City of Woodland's permit to eliminate the EC effluent limit as well as other effluent limits based on the guidelines contained in the UN Report.

Furthermore, the goals contained in the UN Report are not adopted water quality objectives that have been evaluated according to section 13241 of the California Water Code. Before applying broadly to the many receiving waters in the Central Valley, the salinity goals need to be adopted as water quality objectives. In the adoption process, the Regional Board will need to consider a number of factors, including the economic impact of the adopted objective on Central Valley dischargers as compared to the benefit to be gained. Nowhere has the economic impact of meeting these salinity objectives been analyzed.

Finally, CVCWA encourages the State Water Board and the Regional Board to clearly remember the goals of the Porter-Cologne Water Quality Control Act, which is provide water quality protection considering the demands placed upon the water. The California Legislature's intent is clearly articulated in California Water Code section 13000, "[t] he Legislature further finds and declares that activities and factors which may affect the quality of waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible."

In conclusion, the State Board and Regional Board should collectively conduct the following future actions. 1) Evaluate the appropriateness of the numeric criteria that are being used to establish effluent limits for wastewater agencies (both surface and groundwater dischargers; 2) Evaluate valley-wide the availability of surface water for the municipalities currently dependent on groundwater; and, 3) Evaluate the cost of RO, the ability to dispose of the brine and the energy consumption impacts as compared to the benefit to be gained. Until such information is available and the state can confidently establish water quality objectives that are feasible and protective of reasonable beneficial uses, the state should refrain from adopting effluent limits in waste discharge requirements (WDRs) or NPDES permits for salt-based parameters.

---

[1] Ayers, R.S. and D.W. Westcot, Water quality for Agriculture, FAO Irrigation and Drainage Paper, 29 Rev. 1, Food and Agriculture Organization of the United Nations, 1985, at page 7.

Otherwise, many public agencies may be forced to build expensive new treatment facilities for negligible environmental benefits.

Sincerely,

Warren Tellefson
Executive Officer

T:\FAC\CVCWA\330.3\SALINITY COMMENTS 1-20-06